PI TAU SIGMA ANNUAL CHAPTER REPORT

2015-2016

Cal Poly Pomona – Delta Beta Chapter

FOREWORD

The academic year of 2015-2016 proved to be exciting and challenging for the Delta Beta chapter. The executive board worked tirelessly to continue and improve the legacy and prestige of Pi Tau Sigma on campus. The primary and overarching goal for this year was to increase member participation, garnering loyalty and pride for the honor society. Retaining members at Cal Poly Pomona is difficult because it is largely a commuter campus. Other objectives for the chapter included the provision of facility tours, weekly tutoring sessions, and the annual Mechanical Engineering department banquet. All accomplishments of the Delta Beta chapter could not have been possible without the efforts of the following members of the executive board and the club advisor:

President	Eric Cruz
Vice President	Richard Lee
Treasurer	Andres Palomino
Secretary	Daniel Martinez-Gamboa
Events Coordinator	Danny Chon
Engineering Council Representative	Aaron McCain
Advisor	Professor David L. Miller

INITIATION

Before the beginning of the school year, the initiation process was structured and refined. The website created in the previous year was edited to provide the information of the current officers as well as events planned for each month. Frequent meetings were held to discuss the activities regarding initiation, as well as to discuss the master plan for the whole year. The fundamental qualifications to receive a bid to initiate remained the same:

- Top 35% of Senior Class / Top 25% of Junior Class
- 3.0 Overall GPA Minimum
- 2.7 ME GPA Minimum (core units only, excludes General Education)
- 40 ME Units Completed Minimum
- 36 Units Completed at Cal Poly Pomona

The last two hard requirements were implemented to ensure a form of residency at the college, since Junior and Senior status can be achieved in other ways without going through the curriculum at Cal Poly Pomona (transfer students, AP credit, etc.). Completion of the following tasks throughout the course of a quarter were requirements to finish initiation:

- Obtain Signatures from Ten Active Pi Tau Sigma Members (2 Professors, 3 Officers Mandatory)
- Payment of Lifetime Membership Dues
- Complete 5 Service Hours
- Complete 3 Networking Hours
- Attend Initiation Ceremony

Historically, networking hours were not part of the initiation, but were added in an effort to increase social interaction between the incoming members, creating stronger bonds with Pi Tau Sigma so that they would return and contribute to the future of the club. For both quarters of initiation, this requirement was treated with flexibility, and those who had difficulty acquiring them were highly encouraged to seek help from officers. Going on a facility tour counted as 2 hours, regardless of the duration of the tour; going to a company info session counted as 1 hour, regardless of duration. Both community service opportunities and networking opportunities were sought and provided by the executive board to further aid the initiates. Opportunities for internships, full-time jobs, and scholarships were also sought out for the members.

Pi Tau Sigma 2015-2016 New Members	
Fall 2015	Spring 2016
Adam Reyes Alec Hasegawa Christopher Drake James Turcato Juan Santos Kevin Rorick Mitchell Duran Nicholas Martinez Ryan Goff Suzanne Shihadeh Willes Lee	Anthony Nguyen Christopher Hitchcock Benjamin Trinh Benny Ly Phillip Campos Kevin Wong Victor Lopez Yujiro Goto

Initiation meetings were held bi-monthly, and were typically on the odd Tussday of the 10 week quarter system at Cal Poly Pomona. There were 4 meetings total before the ceremonies for each quarter that initiation was held (Fall and Spring). The first meeting was mainly an introduction of what Pi Tau Sigma was about, and initiate sheets were passed out so that potential members could begin completing their tasks. Human bingo was the main event for the second meeting, allowing those in attendance to meet new people and engage in a social activity. During the third meeting, a friendly competition with an egg drop contest strengthened new bonds and encouraged the initiates to work together to achieve a common goal. For the last meeting, pros and cons of the initiation process were discussed so that future activities could enhance the experience of candidates, strengthening their connection with Pi Tau Sigma. At every meeting, current and upcoming events were always announced, and help was always offered for any aspect of the process. The initiation ceremonies were carried out professionally and successfully, and new members were treated out to eat afterwards. Combining the fall and spring quarter initiations, the Delta Beta chapter successfully inducted 11 new members.

Figure 1: Fall 2015 Initiates

Figure 2: 2016 Mechanical Engineering Banquet

CHAPTER ACTIVITIES

Facility Tours

Traditionally, tours at different engineering companies are planned so that Pi Tau Sigma members can explore the possibilities that the industry may offer, as well as create possible job opportunities if they are available. They have a first-hand experience of real life applications in

engineering, which will further aid their pursuit of their desired career paths. There is typically one tour per quarter.

Applied Medical
During the fall, members were able to see engineering being applied in the medical industry. Applied Medical designs and manufactures devices used in laparoscopic surgeries, and they aim to produce products that minimize entry wounds during surgery. The company is vertically integrated, where pretty much all processes from design to production are done in-house. Members were exposed to processes involving plastic and rubber, and the tour guides provided an extensive walk through of the entire lifecycle of a product.

Figure 3: Applied Medical Tour

Philadelphia Gear (Timken)
During the Spring quarter, members were able to see the manufacturing of industrial gears and components. The members were able to to connect their machine design class knowledge to this tour so they were able to get a great perspective on how to apply theory to practical applications.

Workshops
In an effort to create stronger ties with current and incoming members, a few social events were planned. Welding and 3D printer workshops were hosted at a local hackerspace free of charge to members. The members gained knowledge and hands-on experience on different types of welding technique as well as be able to assemble a 3D printer. These workshops were hosted once per quarter.

Pi Tau Sigma 2016 National Convention

This year Cal Poly Pomona was able to send 5 officers and 3 members to the conference at the University of Southern California free of charge. Since USC is located near Cal Poly Pomona, the officers set up a carpool every day of the event. It was an amazing experience for all who attended, being able to network with peers from all over the country. The group collaborated with other chapters in sharing old ideas and traditions while developing plans for the future.

Seeing the passion and success of other chapters instilled motivation to improve the status and success of the Delta Beta chapter.

CAMPUS INVOLVEMENT

Tutoring/Advising

As always, Pi Tau Sigma hosted weekly tutoring and advising sessions during University Hour, an hour when there is no class being held. Most subjects that were tutored were for the fundamental classes such as statics or dynamics, but all were welcome and officers did their best to answer any and all questions. Students also came to be advised about planning their course paths, calling on the knowledge of the veteran students in the program.

Robot Rally

The Robot Rally is an event hosted by the mechanical engineering department annually, which invites local schools to participate in various competitions involving Lego systems and robotics. Students of all ages flood the engineering meadow to win in competitions such as the Impromptu Obstacle Challenge, Sumo Robot Challenge, Fast Line Following Challenge, and the Teamwork Challenge.

45th Annual Mechanical Engineering Department Banquet

Every year, Pi Tau Sigma plans and hosts a banquet for the mechanical engineering department and its students to celebrate the achievements and successes of students and professors alike. In recent years, ASME was enlisted to support the event because of the amount of work needed to host an event for a program as big as the Cal Poly Pomona mechanical engineering program. Mr. Ganpat Patel was invited to impart his massive bank of knowledge and wisdom to students who wonder about the most important things to remember when they go out into the real world. He is President & Founder, Cherokee International, Inc. and Founder & Patron-in-Chief, Ganpat University, Gujarat, India. Professors who excelled in the past year were recognized, and those involved in helping plan the banquet were appreciated. Other festivities for the night included a dinner buffet, a photo booth, a dance floor, and a prize raffle. The new Pi Tau Sigma Delta Beta chapter executive board was introduced, and the outgoing officers were recognized and appreciated for their service.

Figure 4: Ganpat Patel

Figure 5: Current and New Officers

Figure 6: Mechanical Engineering Banquet Flier

FUTURE GOALS/CONCLUSIONS

One of the biggest goals will still be to improve the connections and member base between Pi Tau Sigma and its members. The vision is to be able to host a national convention for Pi Tau Sigma and to contend for the awards for the best chapter. The minimum expectation for involvement of the chapter should be to maintain tutoring services and facility tours every quarter. The Delta Beta chapter has seen stupendous growth in recent years, and the reputation of Pi Tau Sigma is only getting better. This year, Pi Tau Sigma had a retention rate of 100%, having all of its new members be active after their initiation. With the implementation of networking hours, more students have come back and asked to be more involved with the club. It has been an incredible year for this chapter, and it will continue to grow and mature to become one of the greatest clubs to be a part of at Cal Poly Pomona.